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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,018	07/22/2005	Satoshi Yuasa	03500.018032.	3951
5514 7590 04/12/2010 FITZPATRICK CELLA HARPER & SCINTO 1290 Avenue of the Americas NEW YORK, NY 10104-3800				
EXAMINER				
NGUYEN, KEVIN M				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
04/12/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/543,018

Applicant(s)

YUASA, SATOSHI

Examiner

Kevin M. Nguyen

Art Unit

2629

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

Request for Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 23, 2010 has been entered. An action on the RCE follows:

Applicant have cancelled claims 1-13, amended claim 14, and added new claims 18-22. Therefore, claims 14-22 are currently pending and are under consideration in this Office Action.

Response to Arguments

Applicant's arguments with respect to claims 14-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 18, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Robertson (US 5,892,497).

As to claim 14, Figure 14A of Robertson discloses an image display panel of the reflection type (col. 31, lines 18-22) comprising, in a multilayer structure (col. 39, line 60): a first

layer (1403) including a periodic planar arrangement of a plurality of electrophoretic elements (balls), each of the plurality of electrophoretic elements included in the first layer showing one of an opaque black state and a transparent state in response to an input signal (col. 40, lines 20-25; and col. 40, lines 31-33); a second layer (1402) including a periodic planar arrangement of a plurality of electrophoretic elements (balls), each of the plurality of electrophoretic elements included in the second layer showing at least a first color state and a second color state in response to an input signal (col. 40, lines 31-36), wherein the electrophoretic elements included in the first layer are smaller in area than the electrophoretic elements included in the second layer (col. 35, lines 48-59), and the electrophoretic elements included in the first layer and the electrophoretic elements included in the second layer are respectively individually controlled (col. 43, lines 47-54).

As to claim 18, figure 14 (a) of Robertson discloses an image display panel of the reflection type (col. 31, lines 18-22) comprising, in a multilayer structure (col. 39, line 60): a first layer (1403) including a periodic planar arrangement of a plurality of electrophoretic elements (balls), each of the plurality of electrophoretic elements included in the first layer showing one of an opaque black state and a transparent state in response to an input signal (col. 40, lines 20-25; and col. 40, lines 31-33); and a second layer (1402) including a periodic planar arrangement of a plurality of electrophoretic elements (balls), each of the plurality of electrophoretic elements included in the second layer showing at least a first color state and a second color state in response to an input signal (col. 40, lines 31-36), wherein the electrophoretic elements included in the first layer are smaller in area than the electrophoretic elements included in the second layer (col. 35, lines 48-59).

As to claim 19, Robertson discloses an image display panel of the reflection type according to claim 18, wherein each of the electrophoretic elements in the first layer is individually controlled with an input signal (col. 43, lines 50-54).

As to claim 21, Robertson discloses an image display panel of the reflection type according to claim 18, wherein each of the electrophoretic elements in the second layer is individually controlled with an input signal (col. 43, lines 47-50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson (US 5,892,497) in view of Schlangen (US 7,034,987).

As to claim 15, Robertson discloses the image display panel of the reflection type according to claim 14, but does not disclose wherein the second layer includes a first electrophoretic element and a second electrophoretic element, the first electrophoretic element having a green state and a red state, and the second electrophoretic element having a blue state.

Schlangen discloses wherein the second layer includes a first electrophoretic element and a second electrophoretic element, the first electrophoretic element having a green state and a red state (col. 4, lines 9-15), and the second electrophoretic element having a blue state (col. 5, lines 53-57).

At the time of the invention it would have been obvious to one of ordinary skill in the art that the first electrophoretic element having a green state and a red state, and the second electrophoretic element having a blue state could be modified as Schlangen discloses. The motivation for doing so would have been enhanced contrast (col. 2, lines 38-39 of Schlangen). Therefore, it would have been obvious to one of ordinary skill in the art to utilize Schlangen's technique in the device of Robertson.

Claims 16, 17, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson (US 5,892,497) in view of Goodrich (US 4,261,653).

As to claim 16, Robertson discloses the image display panel of the reflection type according to claim 14, but does not disclose wherein each of the electrophoretic elements in the first layer is modulated with a high spatial frequency.

Goodrich discloses wherein each of the electrophoretic elements in the first layer is modulated with a high spatial frequency, col. 6, lines 16-20.

At the time of the invention it would have been obvious to one of ordinary skill in the art that the electrophoretic element is modulated with high/low spatial frequency could be modified as Goodrich discloses. The motivation for doing so would have been maximized transmittance of light energy (col. 8, lines 1-3 of Goodrich). Therefore, it would have been obvious to one of ordinary skill in the art to utilize Goodrich's technique in the device of Robertson.

As to claim 17, Goodrich modified discloses the image display panel of the reflection type according to claim 14, wherein each of the electrophoretic elements in the second layer is modulated with a low spatial frequency (col. 6, lines 42-51 of Goodrich).

As to claim 20, Goodrich modified discloses the image display panel of the reflection type according to claim 19, wherein each of the electrophoretic elements in the first layer is modulated with a high spatial frequency (col. 6, lines 16-20 of Goodrich).

As to claim 22, Goodrich modified discloses the image display panel of the reflection type according to claim 21, wherein each of the electrophoretic elements in the second layer is modulated with a low spatial frequency (col. 6, lines 42-51 of Goodrich).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is (571)272-7697. The examiner can normally be reached on Monday-Thursday from 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on (571)272-76877. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin M Nguyen/
Primary Examiner, Art Unit 2629

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/KMN/

April 9, 2010